R300

Code: 4.100

R300 roundness tester

R300 roundness tester is one of the best devices worldwide for the characterization of surfaces, born from thirty years of experience boasted by SM in this field, it was specifically designed to measure bulky and heavy pieces, with utmost accuracy.

R300 features 3, pneumostatically supported, metrological measurement and positioning axes that ensure fluent movements without frictions and remarkable sturdiness of the entire system.

The main application of R300 consists in the characterization of large size bearings, where all those essential characteristics for the final quality of the product must be determined, among which

roundness and race angles, which are measured by following the piece's profile with more axes working at the same time, thus generating a considerable number of measurements.

CHARACTERISTICS:

Pneumostatic plate

Platform diameter:	450 mm
Expansion diameter:	800 mm
Maximum measureable diameter:	1000 mm
Axial bearing capacity:	1200 kg
Radial run-out (at plate level):	≤0,1 µm
Speed:	0,5 – 3 rpm (measurement) 0 – 6 rpm (positioning)
Friction:	Pneumostatic due to manual rotation
Centring range:	±5 mm
Levelling range:	± 1°
Resolution:	0,1°

Pneumostatic R axis

Useful traverse length:	500 mm
Linearity:	≤ 0,5 µm su 500 mm
Speed:	0,2 – 10 mm/s
Resolution:	0,1 µm

C axis (pneumostatic column)

Useful traverse length:	500 mm
Maximum height :	600 mm (from plate surface)
Linearity error:	≤ 0,5 µm on 500 mm
Speed :	0,5 – 15 mm/s
Resolution	0,1 µm

Pick-up

Measurement positioning:	In three positions (horizontal, vertical, lateral)
Measurement strenght :	Internal/esternal 20 – 150 mN
Measurement range :	±1000 µm

Supplied pick-ups :	N° 3 two-directional of lenght 80 - 150 – 240 mm